

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A method for processing payload requests, the method comprising:  
obtaining a set of criteria for delivering at least one payload, the set of criteria including one or more criterion;  
generating a set of arrays corresponding to each criterion in the set of criteria, the set of arrays including a plurality of array elements corresponding to periods of time;  
obtaining a request for a payload, the payload request including a set of request having one or more criterion wherein the payload request is associated with a time; and  
incrementing a numerical identifier in the set of arrays corresponding to the time associated with the payload request.
2. The method as recited in Claim 1, wherein generating a set of arrays corresponding to each criteria in the set of criteria includes:  
parsing the set of criteria in a particular order; and  
generating a set of arrays in an order corresponding to the particular order of the set criteria.
3. The method as recited in Claim 1 further comprising processing the numerical identifiers in the set of arrays to predict an estimated number of future payload requests.
4. The method as recited in Claim 3, wherein the processing includes applying a trend analysis.
5. The method as recited in Claim 4, wherein the trend analysis includes a least-squared trend analysis.

6. The method as recited in Claim 4, wherein the trend analysis includes a liner regression trend analysis.

7. The method as recited in Claim 4, wherein the trend analysis includes as set theory trend analysis.

8. The method as recited in Claim 1, wherein the payload is an advertisement from an advertisement campaign.

9. The method as recited in Claim 8, wherein the set of payload criteria includes user demographic information.

10. The method as recited in Claim 9, wherein the user demographic information includes a user age.

11. The method as recited in Claim 9, wherein the user demographic information includes a user gender.

12. The method as recited in Claim 8, wherein the set of payload criteria includes one or more keywords.

13. The method as recited in Claim 8, wherein the set of payload criteria includes an identifier of a content provider.

14. The method as recited in Claim 1, wherein each array in the set of array includes 168 array elements.

15. The method as recited in Claim 14, wherein the array elements are representative of 1 hour increments.

16. A computer-readable medium having computer-executable instructions operable to perform the method recited in Claim 1.

17. A computer system having a processor, a memory and an operating environment, the computer system operable for performing the method recited in Claim 1.

18. A system for processing payload requests, the payload requests associated with a set of payload criteria having one or more criterion, the system comprising:

a payload processor operable to obtain the payload criteria and generate a set of arrays corresponding to each criterion in the set of payload criteria, the set of arrays including a plurality of array elements corresponding to periods of time, the payload processor further operable to obtain a set of payload request criteria and increment a numerical identifier in the set of arrays corresponding to a time associated with the payload request; and

a payload manager operable to obtain the set of arrays and to process data within the set of arrays.

19. The system as recited in Claim 18, wherein the payload is an advertisement from an advertisement campaign.

20. The system as recited in Claim 19, wherein the set of payload criteria includes user demographic information.

21. The system as recited in Claim 20, wherein the user demographic information includes a user age.

22. The system as recited in Claim 20, wherein the user demographic information includes a user gender.

23. The system as recited in Claim 18, wherein the set of payload criteria includes one or more keywords.

24. The system as recited in Claim 18, wherein the set of payload criteria includes an identifier of a content provider.

25. The system as recited in Claim 18 further comprising a user information store operable to obtain a user identifier and provide user identifier criteria to the set of payload request criteria.

26. The system as recited in Claim 18, wherein the payload manager is operable to generate future payload and request capacity data by processing the data within the set of arrays.

27. The system as recited in Claim 26, wherein the payload manager generates future inventory payload data by applying a forecasting method.

28. The system as recited in Claim 27, wherein the forecasting method includes a least-squared trend analysis.

29. The system as recited in Claim 27, wherein the forecasting method includes a liner regression trend analysis.

30. The system as recited in Claim 27, wherein the forecasting method includes as set theory trend analysis.

31. The system as recited in Claim 16, wherein each array in the set of array includes 168 array elements.

32. The system as recited in Claim 31, wherein the array elements are representative of 1 hour increments.

33. The system as recited in Claim 18, wherein the payload manager is operable to generate advertisement campaign compliance data by processing the data within the set of arrays.

34. A computer-readable medium having computer-executable components for processing payload requests, the computer-readable medium comprising:

a payload processing component operable to obtain payload criteria including one or more criterion corresponding to a payload request and generate a set of arrays corresponding to each criterion in the set of payload criteria, the set of arrays including a plurality of array elements corresponding to periods of time, the payload processing component further operable to obtain a set of payload request criteria and increment a numerical identifier in the set of arrays corresponding to a time associated with the payload request; and

a payload manager operable to obtain the set of arrays and to process data within the set of arrays.

35. The computer-readable medium as recited in Claim 34, wherein the payload is an advertisement from an advertisement campaign.

36. The computer-readable medium as recited in Claim 34, wherein the set of payload criteria includes user demographic information.

37. The computer-readable medium as recited in Claim 36, wherein the user demographic information includes a user age.

38. The computer-readable medium as recited in Claim 37, wherein the user demographic information includes a user gender.

39. The computer-readable medium as recited in Claim 34, wherein the set of payload criteria includes one or more keywords.

40. The computer-readable medium as recited in Claim 34, wherein the set of payload criteria includes an identifier of a content provider.

41. The computer-readable medium as recited in Claim 34 further comprising a user information component operable to obtain a user identifier and provide user identifier criteria to the set of payload request criteria.

42. The computer-readable medium as recited in Claim 34, wherein each array in the set of array includes 168 array elements.

43. The computer-readable medium as recited in Claim 42, wherein the array elements are representative of 1 hour increments.

44. The computer-readable medium as recited in Claim 34, wherein the payload manager is operable to generate future payload and request capacity data by processing the data within the set of arrays.

45. The computer-readable medium as recited in Claim 44, wherein the payload manager generates future inventory payload data by applying a forecasting method.

46. The computer-readable medium as recited in Claim 45, wherein the forecasting method includes a least-squared trend analysis.

47. The computer-readable medium as recited in Claim 45, wherein the forecasting method includes a liner regression trend analysis.

48. The computer-readable medium as recited in Claim 45, wherein the forecasting method includes as set theory trend analysis.

49. The computer-readable medium as recited in Claim 34, wherein the payload manager is operable to generate advertisement campaign compliance data by processing the data within the set of arrays.